Edison Mission Energy

ICC Policy Committee Meeting Resource Adequacy

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Edison Mission Energy

- Headquartered in Santa Ana, CA, with regional offices in Chicago and Bolingbrook
- Subsidiaries own or lease interests in over 40 operating facilities
 - > Over 9,000 MW in aggregate; EME's share nearly 8,000 MW
 - Fossil-fuel power plants in CA (CAISO), IL (PJM), WV (PJM) & Turkey
 - ➤ One of the largest wind portfolios in the US, including 30 projects in 11 states
 - ➤ Midwest Generation is largest subsidiary operating 4,300 MWs of coal-fired generation at four sites in Illinois (Waukegan, Romeoville, Joliet and Pekin)
- Edison Mission Operation & Maintenance operates 9 natural gas power plants in CA, and many of EME's wind farms
- Edison Mission Marketing & Trading, based in Boston, performs hedging, energy trading & asset management
- Currently undergoing financial restructuring which will separate EME and Midwest Generation from Edison International
 - Normal business operations throughout restructuring process. On October 18, 2013 announced proposed sale to NRG Energy, pending regulatory and Bankruptcy Court approvals
 - Targeting closing for first quarter of 2014; no later than July 31

PJM's Resource Adequacy Construct Address Reliability Need in the Short Term

- Healthy Reserve Margins: PJM's Reliability pricing Model (RPM) has consistently resulted in procurement of capacity resources above the target reserve margin
 - ➤ The latest auction for Planning Year 2016/2017 resulted in a 21.1% reserve margin (5.5% higher than target)
- Vigorous Demand Side Participation
 - Over 14,370 MWs of DR and 1,113 MWs of Energy Efficiency
- Robust "Announced" New Generation
 - Since inception of RPM, over 28,000 MWs of new generation has either entered the market, started construction, or "announced" entry
- Healthy Imports
 - Imports of capacity nearly doubled from last year's auction to 7,483 MW (an increase of 3,558 MWs)

Fundamental Change in the Energy Market Threatens Resource Adequacy in the Long Term

- Renewable public policy initiatives
 - Rapid and increasing renewable integration continue to exacerbate generator margin pressures for the foreseeable future
- Abundance of shale gas
 - Record low natural gas prices resulting in a trend of significant decline in the amount of coal-fired generation clearing in the PJM auctions and a continued shift to increased gasfired generation
 - ✓ The last RPM auction cleared 15,000 MWs more of gas generation than coal
 - ✓ Over 10,000 MWs of coal generation did not clear the auction
- Federal EPA and State environmental policy (Illinois Combined Pollutant Standard, MATS, ... etc.)
- Flat demand growth
- Energy market price formation
 - No meaningful scarcity pricing signals when warranted
 - Lack of transparency in RTO dispatcher actions causing too much "uplift" and "out of market" pricing

Many existing resources could fail to recover their go- forward cost, resulting in disorderly retirements

Reform Needed in PJM's Energy & Capacity Markets

- Allow imports from other regions while taking into account the physical capability of the transmission system
 - Recognize the operational challenges that will result in a rapid increase in imports
- Address the issue of price disconnect between the Base Residual Auction and Incremental Auctions
 - RPM was designed to commit physical capacity resources three years forward
- Align the operational characteristics of DR with the value they are receiving in the capacity market
 - > The Limited DR product (10X6) is a legacy product that may no longer be appropriate
 - The vast majority of DR resources have a minimum of two-hour notice; this ".... complicates reliable grid operations rather than facilitating it"
- Continue to oppose "Out of Market" Entry and avoid proliferation of RMR contracts
- Energy market price formation
 - All dispatcher actions should be reflected in LMP